MONTGOMERY COUNTY FIRE AND RESCUE SERVICE
DRIVER/OPERATOR TRAINING PROGRAM

Practical **A**pplication **G**uide **S**heet

MCFRS Air Brake Test

Driver Performance Competency: Complete a DOT Air Brake Test performing all steps in the appropriate order. This test evaluates a candidate's ability to perform a DOT Air Brake Test. The purpose of the Air Brake test is to verify the safety, reliability, and functionatility of an air brake system.

1.	Chock the wheels of the vehicle.	CFP _____	(8)
2.	Turn the ignition on and verify that all gauges/warning devices are in working order.	CFP _____	(6)
3.	Verify that air brake protection valve (APV) is applied and is in the "Out" position. The applied APV indicates that air is not charging the emergency/parking brake.	CFP _____	(6)
4.	Push in air brake protection valve to charge air into the emergency/parking brake and then allow the air tanks to settle.	CFP _____	(6)
5.	Observe the air gauge for sixty seconds looking for air loss. Verify no air leaks exceeding guidelines (Straight Truck = No more than 3 psi air loss. Tractor Trailer = No more than 4 psi air loss.).	CFP _____	(8)
6.	After one minute has elapsed, place your foot on the brake pedal and apply a steady, holding pressure. Continue to hold steady pressure for one minute after air tanks settle.	CFP _____	(6)
7.	Observe the air gauge while applying steady uninterrupted brake pressure. Verify no air leaks exceeding guidelines (Straight Truck = No more than 3 psi air loss. Tractor Trailer = No more than 4 psi air loss.).	CFP _____	(6)
8.	Begin “fanning” the brakes. Identify that audible and visual low air alarms should activate when air supply is reduced to 60-90 psi.	CFP _____	(8)
9.	Continue “Fanning” the brakes until the air protection valve activates (Pops Out). Identity that APV should activate between 20-40 psi on the gauge. Stop fanning the brakes if the protection valve activates.	CFP _____	(8)
10.	Identify that apparatus will fail the brake test if the APV fails to activate between 20-40 psi.	CFP _____	(6)
11.	Stop "Fanning" brakes if the APV activates.	CFP _____	(6)
	NEVER FAN THE BRAKES WITH THE PARKING BRAKE APPLIED. FANNING OF BRAKES WHEN APV IS ACTIVATED CONSTITUTES CRITICAL FAILURE POINT.		
12.	Start the engine, apply high idle to achieve 1200 RPM. Monitor the air pressure gauges. Identify that air pressure must build from 50 psi to 90 psi within 3 minutes at 1200rpm. (COMAR 11.22.02.06)	CFP _____	(8)
13.	Check all gauges for working pressures, shut down engine, remove wheel chock and place unit back in service.	CFP _____	(4)

Explain the Acronym COLA:

14. **C** = Cut In Pressure-A Cut In Pressure will be approximately 100 psi. Any compressor that does not cut in before 95 psi must be reported to the shop immediately. Any compressor that does not cut-in before 80 psi is OOS. _____ (2)

15. **O** = Cut Out Pressure-Cut Out Pressure will be between 120-135 psi. Any higher than 135 psi must be reported to the shop immediately and is OOS. _____ (2)

16. **L** = Low Pressure Warning-Low Pressure devices will activate at approximately 60- 90 psi. Any device that activates below 60 psi must be reported to the shop immediately. _____ (2)

17. **A** = Air Leakage-with foot on or off the brake pedal, air leakage should be less than 3 psi per minute (4 psi per minute for a Tiller Truck). _____ (2)

Describe **NFPA 1911 Chapter 12. Air Brake System Compressor "Quick Build-Up" Requirement**

18. Apparatus air tanks drained to zero (0) psi. _____ (2)

19. Apparatus motor turned on an rpm elevated to enhance air compressor output. _____ (2)

20. Apparatus will generate a serviceable air brake condition within 60 seconds. Sufficient air pressure is generated so that apparatus can move without brake drag and is able to come to a full stop using it's service brakes. _____ (2)

Minimum Passing Score = 86%

Total Points: _____ / 100 Points

Critical Fail Points (CFP)

Candidate must complete each step of the air brake test in proper order. Any error or omission of CFP steps results in automatic failure.

Candidate Name: _____

Evaluator Name: _____

Evaluator Signature: _____

Test Date: _____

Test Time: _____